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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,663	10/25/2000	Daniel R. Cassiday	SUNIP413/5329	4650

7590 04/06/2005  
B. NOEL KIVLIN  
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AUSTIN, TX 78767-0398

EXAMINER

WONG, BLANCHE

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/697,663	CASSIDY ET AL.	
	Examiner	Art Unit	
	Blanche Wong	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5-7 and 23-32 is/are allowed.
- 6) ☒ Claim(s) 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on November 10, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 16,17,20,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al. (Pat No. 6,233,073) in view of Sabourin et al. (Pat No. 5,903,545).

With regard to claim 16, Bowers discloses a node (Fig. 1) in a communication network comprising:

a receiver 17,21 including a failover buffer 46 (FIFO Delay) for routing (col. 3, In. 45-54) a failover (error detector 44) data packet;

a FIFO data storage area 46 (FIFO Delay) for storing the failover (error detector 44) data packet and routing (col. 3, In. 45-54) the data packet to a receiver 17,21 or a transmitter 18,22; and

the node is configured to detect (error detector 44) a failure (A "mask" FIFO 72 and an "expected" FIFO 73 ... is compared ... by comparator 78 ...., col. 4, In. 60-65.) in a link connected to the node.

However, Bowers fails to explicitly show a failover routing table including at least two rows, a row corresponding to a neighboring node, and one or more interconnect links, wherein if a data packet at the node is scheduled to use the failed link, the failover

route tables are configured to determine an alternative link to transmit the data packet to not disrupt the transmission of the data packet, as recited in claim 16.

In an analogous art, Sabourin discloses a failover routing table Fig. 6 including at least two rows, a row corresponding to a neighboring (FORE,AFT,LEFT,RIGHT) node, and one or more interconnect (L,R,F,A) links, wherein if a data packet at the node is scheduled to use the failed link (col. 2, ln. 21), the failover route tables are configured to determine an alternative link to transmit the data packet to not disrupt the transmission of the data packet, col. 6, ln. 26-col. 7, ln. 15.

A person of ordinary skill in the art would have been motivated to employ Sabourin in Bowers in order to obtain a failover routing table. The suggestion/motivation to do so would have been to minimize the number of dropped data packets by responding to a failed link in a rapid manner. Sabourin, col. 2, ln. 20-21. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Sabourin and Bowers to obtain the invention as specified in claim 16.

With regard to claim 17, Bowers further discloses multiplexer 97 (MUX, col. 6, ln. 22).

With regard to claim 20, Bowers discloses the node as recited in claim 16. However, Bowers fails to explicitly show the failover routing table further comprises a

first column for storing a node identifier and a second column for storing a transmitter identifier.

In an analogous art, Sabourin discloses a node identifier 282 (DN-ID) and a transmitter identifier (FORE, AFT, LEFT, RIGHT are ports for further routing, col. 6, ln. 55).

A person of ordinary skill in the art would have been motivated to employ Sabourin in Bowers in order to obtain a failover routing table with a node identifier and a transmitter identifier. The suggestion/motivation to do so would have been to minimize the number of dropped data packets by responding to a failed link in a rapid manner. Sabourin, col. 2, ln. 20-21. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Sabourin and Bowers to obtain the invention as specified in claim 20.

With regard to claim 21, Bowers further discloses an arbitrator (enable signal feeding into 82 and 83) for determining whether a normal 90 (OFF FIFO) data packet or a failover 91 (ON FIFO) data packet will be transmitted on a link.

***Allowable Subject Matter***

3. Claims 1-3,5-7,23-32 are allowed.
4. Claims 18-19,22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.<sup>39</sup>

Art Unit: 2667

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

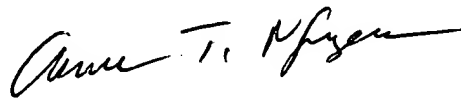
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*BW*

BW

March 28, 2005



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
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